

Nuclear Division News

Vol. 12/No. 5 • March 12, 1981

Educational Assistance Program improved



FINAL REFUND — Randy Green, center, Y-12's Management Information Systems, receives his final refund after receiving an MS in industrial engineering from the University of Tennessee. William H. Thompson Jr. is at the left, and Gordon G. Fee, manager of Y-12's Product Engineering and Scheduling, is at the right.

Union Carbide recently announced improvements in the Educational Assistance Program. Revisions have been made to change from 50 percent reimbursement to 75 percent to eligible employees who satisfactorily complete approved courses of study.

Although a great many Nuclear Division employees have already benefited from the program, and the number of participants continues to increase (see accompanying photos), many employees apparently are not aware of how to apply for reimbursement.

To file an application for educational assistance, simply contact your facility's Educational Assistance Office and discuss your proposed program with the Educational Assistance Representative. You will receive advice on application procedure, eligibility requirements, approved schools and steps to follow for reimbursement.

Each employee must submit a formal, typed application for a refund on Form UCN-59, "Application for Educational Assistance," prior to begin-

ning each course. An application submitted up to one month after a course has begun may be approved if special circumstances (such as unforeseen or uncommitted change in class availability) warrant.

The employee is responsible for keeping all original, signed receipts (cash register tapes are not acceptable) for tuition, necessary supplies, textbooks and laboratory and graduation fees.

(Please turn to page 4)

Earned two degrees...

Whatley's come a long way — with a little help from EAP

Susan K. Whatley, technical assistant to the associate director of physical sciences at ORNL, is one of the many Nuclear Division employees who has made good use of the Company's Educational Assistance Program (EAP).

Whatley joined ORNL in 1957 as a secretary in the Personnel Division. After continuing as a secretary in the former Isotopes Division, she decided to start college in 1970. "I had, of course, completed high school, and I had worked for several years, but I had taken no previous college courses," she explained. "I started from scratch."

She enrolled in one course at the University of Tennessee that fall, while continuing to work full-time at the Laboratory. After completing a course each quarter for two years (for which, of course, she was receiving partial reimbursement as a participant in EAP), Whatley began taking two courses per quarter. During this period, she also took advantage of the University Work Study Program, which permits employees if it doesn't unduly interfere with their work to reschedule or reduce their work hours (not exceeding 20 percent of the time) to fit their class schedules.

After taking a leave of absence in 1974 to complete her undergraduate work, Whatley received her bachelor's degree in engineering science and mechanics in 1976. She then

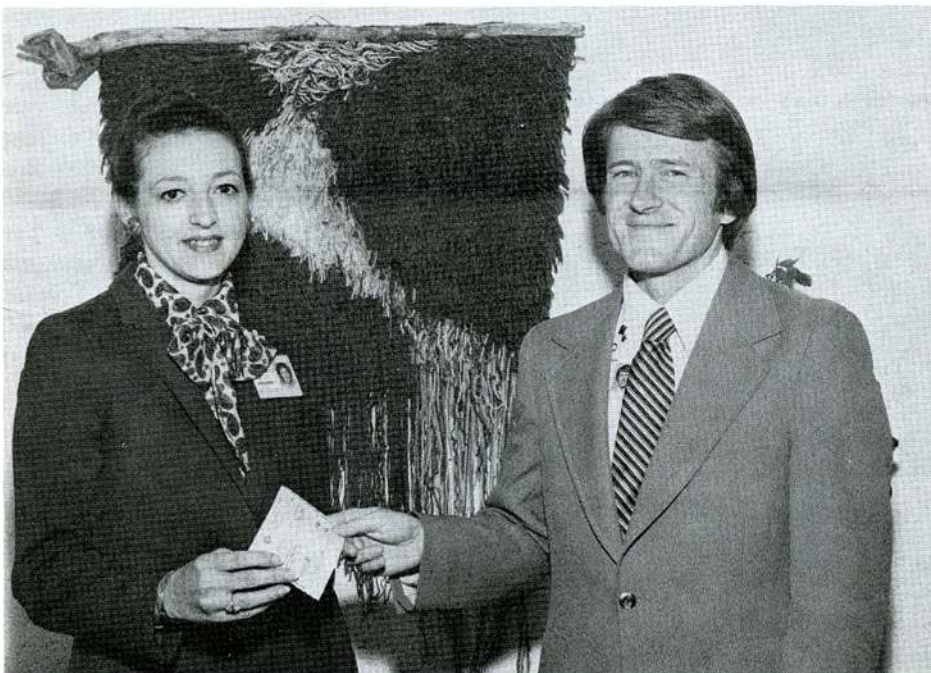


Whatley

returned to ORNL as a research staff member in the Chemical Technology Division.

In 1978, she began attending night school at UTK, and received her master's degree in engineering science and mechanics (as well as a check for the remaining 50 percent of her graduate educational costs) in December, 1979. Shortly before receiving her MS, she was appointed to her current position.

Of the Educational Assistance Program, Whatley said, "It's a definite incentive for employees to further their educations. I know it was certainly a prime benefit for me. Although I might have gone on to school anyway, the fact that I could take advantage of both EAP and the University Work Study Program made it much easier and a lot faster."

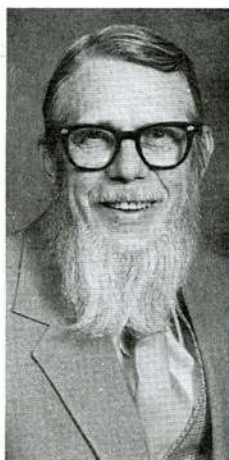


HAS NEW DEGREE — Mary B. Alexander of ORNL's Information Division recently received her master's degree in library science from the University of Tennessee, with help from Union Carbide's Educational Assistance Program. Here she receives her reimbursement check from Information Division Director G. Daniel Robbins.

Facility contacts:

	Educational Assistance Office	Educational Assistance Representative
ORGDP	4-8592	Susan Bookham
ORNL	4-4444	George L. Joseph
PGDP	472	Les H. Freeman Jr.
Y-12 Plant	4-2907	Bill Akers Jr.

Recent Retirements



Charles W. Young
B-2 Expansion
Assembly, Y-12
21 years service



Wilfred T. Ward
Computer Sciences
ORNL
34 years service



Edwain M. Hunnicut
General Expediting
Y-12
37 years service



Harry V. Gillum
Research Services
Y-12
14 years service



Willie L. Parton
Maintenance
Y-12
30 years service



Sidney Katz
Chemical Technology
ORNL
32 years service



John G. Scogin
Process Maintenance
Y-12
30 years service



Stanford G. Hull
Program Engineering
Y-12
30 years service



Joseph E. Morgan
Guard Department
Y-12
29 years service



N. B. Beason Jr.
Alpha 5 West Shop
Y-12
21 years service



Charles H. Oaks
Guard Department
Y-12
30 years service



J. C. Graves
Standards and Surveys
Y-12
27 years service



Charles B. Burns
Plant and Equipment
ORNL
30 years service



Harold W. Watson
Employee Relations
ORNL
34 years service



H. H. Young
Maintenance
ORGDP
31 years service



Clarence D. Hawkins
Computer Sciences
ORGDP
34 years service



H. P. Rainwater
Technical Services
ORGDP
28 years service



Luther H. Grizzle
Fabrication Shop
ORGDP
35 years service



Vaughn L. Reed
Fabrication Shops
Paducah
29 years service



Robert E. Taylor
Machine Shops
Paducah
17 years service



Paul Rowland
Cascade Operations
Paducah
30 years service



Thomas E. McNeely
Compressor Shop
Paducah
29 years service



Edgar Cooper
Tool Grinding
Y-12
26 years service

Recent Anniversaries

ORNL

35 YEARS

Lawrence T. Corbin, Analytical Chemistry; Geraldine Olerich, Analytical Chemistry; Arthur J. Weinberger, Analytical Chemistry; Wiley Jennings Jr., Chemical Technology; Windell Patterson, Operations; James R. McGuffey, Quality Assurance; Byron C. Thompson, Instrumentation and Controls; and Edward L. Nicholson Jr., Chemical Technology.

30 YEARS

Ross S. Jones Jr., Plant and Equipment; George M. Begun, Chemistry; James M. Odom Jr., Plant and Equipment; and Paul R. Kasten, Central Management.

25 YEARS

Noah R. Johnson Jr., Bernard L. Corbett, Edward E. Gross and William E. Terry.

Y-12

35 YEARS

John E. Harding, Engineering senior staff.

30 YEARS

Charles E. Spradlin Sr. and Mack S. Baker, General Shops; Edward E. Gregory, Fire Department; Doyle E. Watons, Alpha 5 Processing; Herman R. Butler Jr., Chemical Services; Ernest Duncan, Utilities Administration; Wilburn Burum, Building Services; Estel J. Delaney, 9215 Rolling Mill; Hence Mitchell, Materials Delivery; William H. Moehl, Production Radiation Testing; and Alvin C. Wood, Buildings, Grounds and Maintenance Shops.

25 YEARS

John H. Ramsey and Vivien A. Anfinson.

20 YEARS

Oscar G. Martin and Alta L. Curtis.

ORGDP

35 YEARS

James C. Qualls, Finance, Materials and Services; Harold B. Shnyder and Edward O. Sternberg, Engineering.

30 YEARS

Lucian E. Paulk, Maintenance; Leon L. Parris, Engineering; Augusta F. Johnson, Purchasing; Leslie R. Powers Jr., Separation Systems; Clarence J. Parrish Jr., Finance, Materials and Services; Dwight E. Hatch, Operations Analysis and Planning; Norman W. Snow, Operations; and Douglas R. Carter, Employee Relations.

25 YEARS

James W. Anderson Sr., Carlen G. Jones, Edsel R. Hensley, John M. Shumpert and Raymond K. King.

20 YEARS

Ethel C. Cannon.

Question Box

What is source of 4-day week study?

QUESTION: In your response to the question of a four-day week, you say that studies have indicated decreased productivity connected with longer working hours. What is your source on this statement?

ANSWER: The source was a 1974 Business Roundtable report which indicated that long-term usage of extended working hours resulted in decreased productivity. As a matter of fact, after a ten-hour day had been used for several weeks, less work was done during the ten-hour period than previously had been done during an eight-hour period. We do not know of any reputable studies that

have been directed solely at a work-week consisting of four ten-hour days.

QUESTION: I have good reason to believe that some confidential mail of mine was opened before I got it. Is there some way I can prevent a recurrence of this?

ANSWER: It is difficult to give you a specific answer without additional information. We suggest you discuss the specifics with the person who opens your mail and/or your supervisor. Work addresses should be used only for work-related correspondence.

Safety Scoreboard

Time worked without a lost-time accident through March 5:

Y-12 Plant.....	164 Days	5,537,000 Employee-Hours
ORGDP	165 Days	4,979,127 Employee-Hours
ORNL	298 Days	7,055,119 Employee-Hours
Paducah.....	219 Days	2,034,000 Employee-Hours



THESE DESCRIPTIVE map/brochures are now available to Nuclear Division employees. Each contains: brief historical information; a summary of programs and missions of the facility; photographs of employees at work and an aerial view of the plant; as well as a layout of buildings by number and function. Copies may be obtained from the Public Relations Offices at the Oak Ridge facilities and from Employee Relations (C-100 building) Paducah.

Organization changes noted in Fusion Energy Division

Organizational changes in ORNL's Fusion Energy Division have been announced by Murray W. Rosenthal, ORNL associate director for Advanced Energy Systems.

John Sheffield, formerly head of the division's Experimental Confinement Section, has been named associate Fusion Energy Division director. The Experimental Confinement Section has been divided into two new sections; the EBT Experimental Section, to be headed by Lee A. Berry, and the Tokamak Experimental Section, to be headed by Michael J. Saltmarsh.

As associate director, Sheffield will assist Division Director O. B. Morgan in the management of the division and will aid Rosenthal in coordinating fusion activities throughout ORNL. Rosenthal has since last fall served also as acting ORNL Fusion Program director, a position that will no longer exist.

Berry, who has been manager of the EBT program, will continue this responsibility in addition to assuming his new position.

Sheffield came to the Fusion Energy Division in 1977 from the United Kingdom Atomic Energy Authority's Culham Laboratory in Oxfordshire, England, where he was a principal scientific officer. In December 1977 he was named head of what was then the Tokamak Experimental Section, and became head of the Experimental Confinement Section when it was created the following year.

He received his BS degree from Imperial College and his MS degree from Northern Polytechnic, both in London, and his PhD from the University of London. From 1966 until 1971 he was an assistant professor in the Center for Plasma Physics and Thermonuclear Research at the University of Texas.

Sheffield and his wife, Dace, live with their two sons at 24 Mona Lane, Oak Ridge.

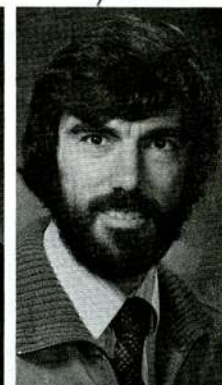
Berry received his BS degree in mathematics and physics and his MS and PhD degrees in physics from the



5108-77 Sheffield 1072-81



Berry



Saltmarsh

University of California at Riverside. He joined ORNL's Thermonuclear (now Fusion Energy) Division in 1970. He was head of the division's Tokamak Experimental Section from 1974 until 1977, and director of ORNL's Fusion Program from 1977 until 1980.

Berry, his wife, Linda, and their daughter live at 156 Newport Drive, Oak Ridge.

Saltmarsh joined Union Carbide in 1968 in ORNL's Electronuclear Division, which later became the Physics Division. In 1977 he came to the Fusion Energy Division, where his most recent position has been head of ISX Operations.

He holds a BA degree in physics and a DPhil degree in nuclear physics, both from the University of Oxford, England. He has conducted nuclear and high energy physics research at the University of Grenoble, France, and at the European Center for Nuclear Research (CERN) in Geneva.

Saltmarsh and his wife, Sheila, live with their son and daughter at 105 Pomona Road, Oak Ridge.

Save Energy / Share the Ride

ORNL

VAN POOL RIDERS from West Knoxville, Bearden and Farragut area to East and West Portals, 8-4:30. Dean Treadway, plant phone 4-6580; home phone 584-4879.

CARPOOL RIDERS NEEDED from Cedar Bluff Shopping Center to East or South Portal 7:30-4:00. K. Weeks, 4-5462; C. Wiggins, 4-5461; or B. Gateley 4-5465.

VAN POOL RIDERS from West Knoxville (Walker Springs, Cedar

Bluff, Kingston Pike, Lovell Road) to East, South or West Portals, 8-4:30. Mike Caldwell, plant phone 4-4885, home phone Knoxville 691-4194.

RIDE NEEDED from Oak Ridge Highway between Karns and Solway to East Portal, 8:15-4:45. Peterson, plant phone 4-4483; home phone 690-3989.

VAN POOL riders wanted from Rocky Hill, West Town Mall area, Knoxville to South and West Portals, 8-4:30. W. L. Pattison, plant phone 4-6880, home Knoxville 691-0781.

News About People



Hartman



Keller



Skinner



Stevens



Niyogi



Masker

Six ORNL staff members have been elected Fellows of the American Association for the Advancement of Science (AAAS). They are Frederick C. Hartman, Warren F. Masker, Salil K. Niyogi, Audrey L. Stevens and Dorothy M. Skinner, all of the Biology Division; and O. Lewin Keller Jr., Chemistry Division.

A Fellow is described by the AAAS as "a member whose efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished."

Hartman came to the Biology Division in 1966 and is currently head of its Molecular and Cellular Sciences Section, where he is involved in enzyme research. He was a National Institutes of Health Postdoctoral Fellow for two years at the University of Illinois. He and his wife, Tish, have two daughters; the family lives at 123 Nebraska Avenue, Oak Ridge.

Masker held fellowships at the University of Rochester, Stanford University and Harvard University Medical School before joining the Biology Division staff in 1975. His research interests involve DNA replication and repair. Masker lives at 103 Viola Road, Oak Ridge.

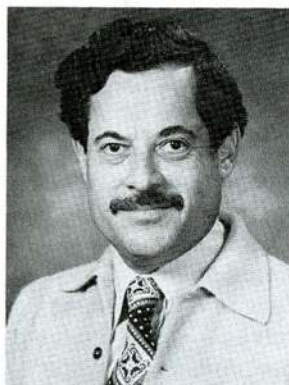
Niyogi, who joined the Biology Division staff in 1966, has held research associate positions at Stanford University, the University of

Maryland and Johns Hopkins University. He currently conducts research on the molecular biology of tumor viruses. Niyogi is married to Audrey Stevens, and the couple lives at 102 Windgate Road, Oak Ridge, with their two children.

Stevens came to the Biology Division in 1966 after holding teaching positions in the schools of medicine at St. Louis University and the University of Maryland. A former National Science Foundation Fellow, she is involved in research on the synthesis and degradation of RNA.

Skinner came to the Biology Division in 1966, where she conducts research on satellite DNAs and on growth and its control in Crustacea. She has held administrative and teaching positions at Tufts University and New York University Medical Center. She and her husband, John S. Cook, live at 124 Westlook Circle, Oak Ridge.

Keller has for seven years been director of the Chemistry Division, which he joined in 1960. For eight years he was director of ORNL's Transuranium Research Laboratory. His research has focused on the chemistry of transuranium elements (those heavier than uranium). He and his wife, Dona, live at 101 Morgan Road, Oak Ridge; they have four children.



Hahn



Peterson



Trotter

Richard L. Hahn and Joseph R. Peterson, ORNL Chemistry Division, have been elected 1981 officers of the American Chemical Society's (ACS) Division of Nuclear Chemistry and Technology. Hahn is chairman-elect and Peterson is treasurer.

ACS has 30 divisions covering a broad spectrum of scientific and technical disciplines. The Division of Nuclear Chemistry and Technology currently has about 1,000 members in areas ranging from fundamental studies of radioactive elements to practical applications of radioactivity and nuclear technology.

Hahn joined Carbide in 1962. He is a Chemistry Division group leader and Director of the Transuranium Research Laboratory. Hahn was the 1977 recipient of ACS's Radiation Industry Award.

He and his wife, Sheila Thomas Hahn, live at 4121 Guinn Road in Knoxville. They have three daughters.

Peterson, a part-time employee in the Chemistry Division since 1967, is a professor in the University of Tennessee's Chemistry Department.

He lives with his wife, Hannelore Inge Peterson, and their two children at 344 Sevenoaks Drive in Knoxville.

Next issue...

The next issue will be dated **March 26**. The deadline is **March 18**.

Troy C. Trotter, project engineering head for the three Nuclear Division plants, was recently named to Tau Beta Pi, a national engineering honor society. He was cited for his accomplishments in that field. A native of Sevierville, he has a BS in chemical engineering from the University of Tennessee. He joined Union Carbide at Y-12 in 1951, transferring to ORGDP in 1973. He is a registered professional engineer in Tennessee and belongs to NSPE, TSPE and the American Institute of Chemical Engineers. He and his wife, Reva, live at 103 Ulysses Lane, Oak Ridge.

Patent granted

Orlan O. Yarbrow, ORNL, for "Apparatus for Leaching Core Material from Clad Nuclear Fuel Pin Segments."

Educational assistance

(Continued from page 1)

Qualified courses of study are those that lead to an appropriate formal degree, or those that the Company considers to be directly related to the fields of work carried on at the employee's installation. Courses must be taken at a recognized school or college, and the course must be completed satisfactorily with either a grade card, letter, or certificate from the school.

Upon completion of the course, the employee should take all receipts and grade slip to the facility Educational Assistance Office, where the application will be processed for payment.

Upon receipt of an advanced degree (master's or doctor's), the employee is eligible for reimbursement of the additional 25 percent of costs; thus, the employee should notify his or her Educational Assistance Representative immediately to facilitate reimbursement.

If you have questions, or if you wish to join the ever-growing ranks of Division employees who are taking advantage of this program, just call your facility's Educational Assistance Office. The person there will be happy to help you.



May

John May named Large Coil Facility head in Fusion

The appointment of John R. May as head of Large Coil Test Facility (LCTF) Operations in ORNL's Fusion Energy Division has been announced by O. Bill Morgan, division director.

LCTF Operations is part of the division's Large Coil Program, under which superconducting magnet systems are being developed for use in fusion power reactors. May's responsibilities will include planning facility operations, training its staff and supervising experimental operation, an activity that is expected to continue for several years.

May holds bachelor's, master's and PhD degrees in chemical engineering from Northwestern Technological Institute, the University of Michigan and Iowa State University, respectively. He began his career in 1953 with AiResearch Manufacturing Company in Los Angeles and Phoenix, and six years later joined Sundstrand Aviation in Denver.

In 1968 May joined the staff of Grumman Aerospace Corporation, Bethpage, N.Y., where he held a variety of positions before being assigned in 1976 as consultant to ORNL's Large Coil Program to assist in the design of the LCTF. He joined the Nuclear Division staff at the end of 1980.

May is a member of Sigma Xi scientific honorary and Phi Lambda Upsilon, an honorary chemistry society. He and his wife, Bernadine, live at 8704 Rushmore Drive, Knoxville; they have three daughters and two sons.

Chem Tech to hold 'St. Paddy's' dance

The ORNL Chemical Technology Division will hold its 31st Annual St. Patrick's Day Dance on Friday, March 20, at the West Knox Knights of Columbus Club on Idlewood Lane in West Knoxville.

A social hour begins at 8 p.m., followed by dancing until 1 a.m. to the music of "Silhouette."

Tickets are available in each section head's office. For more information, contact Karen Pannell at extension 4-6857.

Treating hypertension

by T. A. Lincoln, M.D.



High blood pressure (hypertension) has been treated with a bewildering array of drugs over the past 25 years. Although there have been numerous examples of individual control and apparent improvement in life expectancy, let's look at the much larger "national" picture. Have the effort and expense of millions of pills, thousands of unpleasant side effects and controlled diets been successful?

The answer appears to be a resounding "yes." Congestive heart failure caused by hypertension used to be quite common; now it is relatively rare. The incidence of cerebrovascular accidents (strokes) has declined almost 25 percent in the past 10 years. The death rate from coronary heart attacks has also declined dramatically during the same period.

Treatment has advanced

However, the success is not entirely attributable to better control of hypertension. As a matter of fact, the decline in heart attack rate seems to be related only slightly to better control of high blood pressure. Nevertheless, the treatment of hypertension has advanced to a point where the prolongation of life, reduction of complications and long-range improvement in quality of life are nearly guaranteed those who undergo comprehensive treatment.

Researchers in the Hypertension Detection and Follow-Up Program (HDFP) of the National Heart, Lung and Blood Institute of the National Institute of Health have published the results of an extensive five-year study. The study involved 178,009

persons, 30-69 years old, in 14 communities throughout the U.S. Three consecutive blood pressure readings were taken, and if the average diastolic pressure (the lower number in the reading) was 95 or more, the individual was referred to an HDFP center, regardless of current antihypertensive treatment. There, if the diastolic pressure registered 90 mm or more on a special monometer, the person was considered a potential participant. Some 10,940 were selected.

These participants were divided randomly into two major groups. Half were put into an intensive stepped-care treatment program (SC), and half were referred to their personal physicians for treatment (RC). The SC group received free intensive care designed for maximum benefit with minimum inconvenience. Medication was increased stepwise to bring patients down to or below their goal diastolic blood pressure (DBP), defined as 90 (mmHg) for those entering with a pressure of 90-99, and as a 10-mm decrease for those entering with a DBP of over 100. Each participant in the SC program was advised to avoid high salt intake; to lower body weight, if it was more than 40 percent above desirable weight; to try to lower the cholesterol level, if it was over 250 mg; and to stop smoking.

At the end of the study, death rates from all causes were determined for participants in both the stepped-care and referred-care groups in the three blood pressure categories. There was a 17 percent overall reduction in mortality rate in the stepped-care

group. In those whose initial pressure was 90-104, a 20 percent reduction had occurred. In those whose pressure was 105-114, there was a 13 percent reduction, and in those over 115, there was a 7 percent reduction.

When one looks at the detailed findings for the two major groups, it is clear that they were nearly identical for most of the risk factors, including age. The difference in success rates between the SC and RC groups must be attributed primarily to the intensive pharmacological treatment.

Black men and women and white men had 27.8, 18.5 and 14.7 percent respective reductions in five-year death rates. As expected, the greatest differences were found in the subgroups aged 50-59 and 60-69 years. Nevertheless, black women aged 30-49 experienced a 28 percent reduction in death rates.

Dramatic implications

The implications of these studies are dramatic. Intensive antihypertensive treatment of patients suffering from mild as well as moderate hypertension produces impressive reductions in death rates within five years. Intensive outpatient care produces more impressive results than casual care. If the comparative group had consisted of patients receiving no care at all, the reductions in the death rates would probably have been much greater.

The staffs of many occupational medical departments have long been aware of the potential benefits from an aggressive antihypertension program. The modest costs associated with such a program pay for themselves many times over in lives saved, reduced numbers of illness and disability and decreased insurance costs. Here is one area where the personal health goals of the individual and the savings for the company should be totally compatible.

Surprisingly, however, the idea of aggressive efforts to prevent the complications of hypertension is often a difficult concept to "sell" to managers of medical programs.



THE PREVENTION WINNERS — Fire extinguishers were given 29 Paducah employees during Fire Prevention Week recently. The emphasis this year featured a film, "Fire in My Kitchen," and window decals were handed out to pinpoint the rooms of children and adults. In the front from left are P. M. Strong, C. S. Rodgers, M. E. Burgess, Nancy Sanderson, and B. E. Williamson. In the center are Fred Johnson Jr., G. W. LeMay, C. E. Wilkinson, R. E. Hagler, A. L. Waldon and H. A. Grief. In the back are T. W. Massa, J. C. Sanderson, D. L. Richards, J. O. Norntrop, J. L. Estes, M. D. Wicker and R. C. Ford. Not present were E. A. Waggoner, J. M. VanCleve, B. A. Abell, C. E. Cornwell, D. E. Kenley, R. B. Mitchell, R. L. Shetler, Eddie Holder, D. S. Wade, P. D. Tracy and E. L. Cadwell.



CARBON TOURNAMENT CHAMPS — The volleyball crown in the Carbon tournament went to the Environmental Disasters. From left are Jerry Jones, Sigurd Christensen, Phillip Lowery, Michelle Richard, Brian Spalding, Jan Coe, Ron McConathy, Sharon McConathy and Bill Johnson.



CONFUSION — The winning team in the Nuclear League volleyball tournament is the Confusion, above. From left, kneeling, are Dave Schott, Russ Overby, John Glowienka and Howard Dyer. Standing are Charles Snodgrass, Wayne Haulberg, Harold Ketterer and Reid Gryder. Terry White was not pictured.



CARBON LEAGUE CHAMPS — The Net Profits took the Carbon League, North Division, championship as volleyball ended recently. In the front row, from left, are Joan Taylor, Karen Tompkins, Joanne Ramey (holding Jamie Blue), Ann Aaron and Robyn Schultz. In the second row are Dan Ramey, Mike Younkin, Andy Tompkins, Jimmy Blue, Greg Groover and Scott Aaron. In the rear are Robin Taylor, Jim Gibson and Fred Schultz.



THE HAWKS — Taking the tournament crown in the Nuclear League are the Hawks, from the left, Mark Albert, John Purnell, Dennis Strickler, Wes Hightower, Fred Wetzel, Bob Seyfried, Ron Uglo and Trig Myhre.

Around the alleys...

Y-12 Classic...

The Ridgers continue their hold on the Y-12 Classic bowling league top...outdistancing the Atta-Boys and Splinters. The Playboys were high recently, posting a 3107 handicap series. Elmer Johnson rolled a 695 series...Bill Patrick a 289 single game.

Monday Mixed...

The Four Eagles finished the first half of the Monday Mixed League barely one-half point ahead of the Pacesetters. The current standings find the Roadrunners in the first place followed by the Lucky Strike crowd. Mary Lee Johnson recently rolled a 637 handicap series to take over the lead there...beating Tammie Bell's score by two pins. The Blonde Bombers grabbed the high and team game and series by posting a 902/2403 score. Still leading in the league with high averages are Churchill Morre, 182; and Cheryl Woman, 165.

UCC Mixed...

The Safeguards captured the lead in the UCC Mixed League recently holding back the Go Getters and Lickity Splits. Trish Lankford's 685 is still high series for women while Dave Moseley's 698 stands high for men.

ORNL C...

The Hit Men are 13½ points ahead of the Timberwolves in the ORNL C League. Weekly highs recently went to the Knuckleheads, 3029 high series. The Engineers' Samuels posted a high series of 665, however. High average in the league goes to the Cellular Dwellers' Stacy, with a 182.

ORGDP Women's...

The Guttermaids have moved into first place in the ORGDP's Women's League. The Jay Hawks were bowlers of the week recently, posting scores of 647-768 and 821 for a total of 2236. Individual honors went to Betty Rose for games of 201-252-212 for a total of 665. Elaine Griffies' scratch scores of 212 for a single, 566 for a series, are still high for the season.

ORNL A...

The ORAU team still dominates the ORNL A League, rolling on Monday nights. They have leads over the Turkeys and Woodchoppers. The Dynamics put up a 3048 series recently, as the Turkeys' Lillie rolled a 659 series, with the Zots' Moneyhun rolling a 249 single.

K-25 Tuesday...

The Mishaps still have the lead in the K-25 Tuesday League, out past the Atoms and All Stars who are tied for second place. S. S. Stief's single of 253 scratch, 281 handicap was high for individual rolling for the week...as Frank Strang rolled a 710 handicap series.

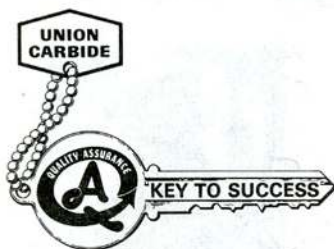
Family Mixed...

The Oops team still controls the lead in the Carbide Family Mixed League, ahead of the Hits & Misses and Pin Ups. Don Carpenter's 594 and Edith Duckworth's 568 are high scratch series thus far.

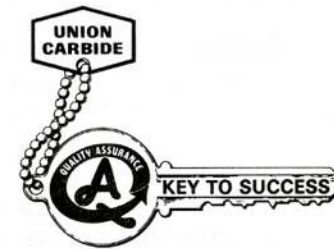
K-25 Wednesday...

The Amps are still in front of the pack in the K-25 Wednesday League. Chuck McCluskey's 277 is high scratch still for the year...Lou Finley's 687 is high series.

Be a believer — quality is worth the effort



(EDITOR'S NOTE: March 22-28 has been designated "Quality Assurance Week" at Nuclear Division facilities in Oak Ridge and Paducah. Activities will coincide with similar observances throughout Tennessee, Kentucky and five other area states. The purpose of the observance is to emphasize the importance of quality attitudes and the acceptance of individual responsibility for achieving quality work. The QA calendar on this page lists some of the activities that are planned for the week within the Nuclear Division and the area.)



By E. A. Waggoner, PGDP Quality Assurance Coordinator

Miracles do happen — but don't rely on miracles to keep the quality problems away.

Some dramatic things are beginning to happen across the country in regard to the total quality effort. It can almost be described in terms of a religious movement. As part of this movement, poor quality has been recognized by industry as an arch-enemy in the battle for economic survival. A serious effort is underway to conquer the forces that undermine industry's ability to compete in the world marketplace.

There is power in the masses. This is demonstrated over and over again on the nightly news. Just as people rebel against oppression and shady principles, they also rebel against those things that have adverse impacts on their pocketbooks and their feelings of economic security. Although the masses are basically patriotic, they are perfectly willing to "shop Japan" if that is where the quality and/or economic values seem to be.

Consumer and producer

Industry leaders are beginning to recognize that there should be a strong bond between the consuming public and the producers of goods and services. Both will benefit from the quality effort in two very distinct ways: first, through the direct benefit of producing a product pleasing to the customer at a competitive price, and second, through the resulting change in the total national economic climate including the positive impact on productivity and inflation.

It must be recognized that good quality doesn't "just happen." It is not even reasonable to assume that good quality is an automatic byproduct of other strong management activities, such as hiring good people, providing top equipment and facilities, paying good wages, providing excellent fringe benefits and implementing sound training programs.

Things go wrong

The natural tendency, and this has been proven, is for quality to slide — not to get better. Many of the natural forces at work, as well as forces created by our political climate, tend to impact quality in a negative manner. Machines break down, people make mistakes, attitudes sour, government regulations oppress, etc.

Industry leaders, therefore, are recognizing that special actions must

be taken in addition to the more generally accepted quality control activities. Such special actions emphasize "planning for prevention" as opposed to the more routine control function, including inspection. The program to ensure that the total quality effort is functioning is now designated in many industries, including Nuclear Division, as the Quality Assurance Program.

'Keep it simple'

In determining the appropriate QA effort to expend, industry must come to grips with the long-range economics of the quality effort. Bigness may not be best. In Martin R. Smith's book, *Qualitysense*, he relates an incident in which a manager talks in terms of using the KISS technique in quality management, which means, "Keep It Simple, Stupid."

Those in industry are learning to tailor the QA program to the situation by emphasizing the fundamentals of strong management planning — doing a few strong but simple things in the way of leadership, but placing the real burden of quality on the shoulders of the line organizations — where it belongs. There is no substitute for strong management commitment and leadership in defining and planning the appropriate, cost-effective quality effort. This effort will include such things as:

1. developing a clear statement of policy;
2. establishing realistic objectives;
3. requiring the development and implementation of action plans to meet the objectives;
4. performing necessary monitoring to assure adequate functioning; and
5. providing necessary feedback to evaluate overall results in terms of economics and personnel acceptance.

Obtaining quality must be recognized as a cost of doing business. If QA is appropriately applied, however, the total cost of quality will decline with an added benefit of increased productivity, reliability and customer demand. If this is not the case, it is obvious that the QA effort is inappropriate and will require radical changes.

The QA programs in the Nuclear Division facilities strongly support the concept that actual quality must come from those doing the work.

Although QA actions don't directly solve problems, the actions should cause things to happen that prevent the occurrence of serious problems.

Before great inroads are made to prevent or solve serious quality problems on an industry-wide basis, attitudes toward both quality and productivity have to be changed — both by labor and management. It has been proven that a team effort is required to effectively prevent or solve problems when they occur. The success of the team effort has been clearly demonstrated by the Japanese.

In summary, those in American industry have an impressive testimony to give in regard to their current drive to win people to the quality effort. Some industries have reported that, in terms of quality cost reported as a percent of sales, the cost has been cut in half. This means

that, for a company with a \$5 million sales volume, a reduction in quality costs from eight to four percent will effect an annual savings of \$200,000.

Regardless of how the savings are used (whether they are reinvested for greater productivity, passed on to stockholders, passed to consumers as price reductions, given to workers as wage increases or a combination of the above), the influence is positive for the nation and the people involved.

Quality costs and benefits may be more difficult to measure in most Nuclear Division activities. However, the benefits are significant if the QA effort is well managed and receives strong support from everyone. QA Week is an excellent time for all personnel to reassess and evaluate their contributions to the total quality effort.

Area QA Calendar

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|--------------------|--|
| March 19 | Quality assurance discussion on Knoxville's WATE-TV, Channel 6, "Good Morning Tennessee" show at 6 a.m. Participants from The Nuclear Division will be Fred Mundt, Director of Quality Assurance, and Clyde Hopkins, Executive Director for Support and Services at ORNL. |
| March 21 | Quality assurance discussion on Paducah's WPSD-TV, Channel 6, "Accent" show at 5:30 p.m. |
| March 23 | Quality assurance discussion on Knoxville's WBIR-TV, Channel 10, "The Carl Williams Show" at 6:30 a.m. |
| March 23-27 | Official Nuclear Division Quality Assurance Week. Special meetings, including videotape showings, held throughout the Division. QA contest winners announced. |
| March 24 | PGDP-supported quality clinic at Mayfield, KY., Holiday Inn. |
| March 25-27 | "Managing for Quality" seminar conducted by internationally recognized consultant Jack Kidwell at the University of Tennessee Stokely Management Center. |
| March 26-28 | 22nd Annual Quality Clinic & Seminar at the Knoxville Hyatt Regency Hotel. Sponsored by the American Society for Quality Control (ASQC) and the University of Tennessee. |
| March 27 | Quality Week banquet at the UT Carolyn Brown Student Center Hermitage Room, 7:30 p.m. Guest speaker for the banquet, sponsored by the ASQC and Knoxville area businesses, will be Paul Shoun, Division of Power Systems Operations, TVA, Chattanooga. Topic: "Quality of Living — Situation Ethics." Tickets for the banquet, which is open to all individuals interested in QA, may be purchased from: Martha Ross, UTK Department of Conferences, 1629 Melrose Avenue, Knoxville, TN 37916. Telephone: 615/974-5261. Tickets are \$9 per person. |

Fred Mynatt named director, Instrumentation and Controls

Fred R. Mynatt has been appointed director of the Instrumentation and Controls Division at ORNL, effective April 1.

Mynatt, whose appointment was announced by Donald B. Trauger, associate director for nuclear and engineering technologies, currently is program director for all Nuclear Regulatory Commission-sponsored programs at the Laboratory. These responsibilities include reactor safety research and technical support for the regulatory process.

Mynatt succeeds Herbert N. Hill, who has accepted a position with Beckman Instruments, Inc., Fullerton, Calif.

The Instrumentation and Controls Division provides support to Laboratory programs in energy technology development as well as basic and applied research in the physical and life sciences. The division is responsible for research, support, and maintenance functions designed to provide for reliable operation and rapid and continuous improvement in instrumentation and control systems.

Mynatt has served as director of NRC programs since 1977. Previously, he was head of the nuclear engineering analysis section in the former Neutron Physics Division. He joined the Nuclear Division staff in 1965 as a member of the scientific applications department at the Computing Technology Center.

He holds BS, MS and PhD degrees in nuclear engineering from the University of Tennessee. Before coming to Oak Ridge, he worked in the analytical physics group of Pratt and Whitney Aircraft Company's Connecticut Advanced Nuclear Engineering Laboratory.

Among his major recent responsibilities has been coordination



Mynatt

of support provided by ORNL following the accident at the Three Mile Island nuclear power plant and the planning of new research programs in response to issues raised by the accident.

His earlier research specialties include radiation shielding, reactor physics, and radiation effects of nuclear weapons. He also is the developer of a radiation transport computer program used throughout the world in reactor shielding analysis.

In 1976 Mynatt served as chairman of the ORNL Computer Committee which prepared a long-range plan for the development of these facilities, and he is presently chairman of the ORNL subcommittee on future technology in computing.

He was elected a Fellow of the American Nuclear Society in 1978 and is a past chairman of the society's Radiation Protection and Shielding Division. In 1980 he was honored as an Outstanding Engineering Alumnus by the University of Tennessee.

The Mynatt family lives at 10636 Sandpiper Lane, Concord.

James H. Thomas appointed department manager at PGDP

James H. Thomas, former plant manager at Allied Chemical in Metropolis, Ill., has been named manager of the Environmental Control, Industrial Hygiene, Safety, Waste Management and Medical Departments at the Paducah Plant.

Thomas is a graduate of Murray State University, and has done graduate work there, earning an MBA in 1979.

He joined Union Carbide at ORNL in 1966, working in isotope preparation. He later joined Allied Chemical as a development chemist.

A member of the American Society of Testing and Materials (Nuclear Fuels), the American Chemical Society, American Nuclear Society, American Standards Institute and the Development Council of David Lipscomb College, Thomas has also been active as a member of the board of directors of the Massac Chamber



Thomas

of Commerce, the executive board of the Boy Scouts of America and Rotary International.

He and his wife, Diane, have three sons, Eric, Scott and Alex. They live on Hillmont in Paducah.

Save Energy/Share the Ride

Y-12

BUS POOL riders from Maryville/Alcoa Highway to all portals, 8-4:30. Joel Horton, plant phone 4-3121, home phone Maryville 983-9160.

BUS POOL forming from Rockwood, Midtown and Kingston to any portal, 8-4:30 shift. Tommy Roberts, plant phone 4-0887, home phone Rockwood 354-2789.

JOIN CAR or VAN POOL from River Road, Kingston, Highway #58, to North Portal, straight day. Ward Wright, plant phone 4-3898, home phone Kingston 376-3610.

VAN POOL RIDERS from Kingston Pike, Suburban Center, Downtown West, Cedar Bluff, Mabry Hood Road, to any portal, straight day. C. W. Greene, plant phone 4-0437, home phone Knoxville 690-3762.

VAN POOL RIDERS from old Farragut High School, via Lovell Road, to East Portal, 8-4:30. W. R. McManus, plant phone 6-7502, home phone Concord 966-5106.

RIDE or JOIN CAR POOL from Norwood section, Oliver Springs, to West Portal, E Shift. D. A. Ford, plant phone 6-4792, home phone Oliver Springs 435-7820.

JOIN CAR POOL from Walker Springs Apartments to North Portal, 8-4:30 shift. Terri Shipley, plant phone 4-3173, home phone Knoxville 691-1345.

RIDE from Kentwood Drive, Norwood area, to East or Biology Portal, straight day. W. W. Wright, plant phone 4-0226, home phone Knoxville 687-9642.

RIDE from Hines Valley Baptist Church, Yarnell Drive to East Portal, straight day. John Alred, home phone Knoxville 690-3840, plant phone 4-0053.

The Cumberland Estates Bus Line is now accepting riders from the Cumberland Estates area to the Y-12 Plant. For additional information, contact Gale Helton, plant phone 6-4601; home phone Knoxville 690-3949.



MIRACLE CAST — The cast of "The Miracle Worker" include Kimberly McCulla, Tom Huffstetler, Darryl Miller, Charles Crume, Rachel and Sonya Nanstad, Jennifer Turk and Kerrigan Webb, in front. The dramatic story of Helen Keller's childhood will be presented March 13, 14, 20, 21, 17, 28 and 29 at 8:20 p.m. and Sunday, March 22 at 2 p.m. at the Oak Ridge Playhouse. The March 29 performance will be signed for those with hearing impairments.

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